Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An optical substrate comprising:

at least one prism structure, each of the at least one prism structures having a first surface characterized by a first surface structure function modulated by a second surface structure function, the first surface structure function having characteristics to provide that each of the at least one prism structures has a cross section with at least one curved side to provide defocusing diffusion to light incident on the substrate, the second surface structure function having characteristics to provide additional diffusion to the light incident on the substrate.

2. (Original) The optical substrate of claim 1, wherein the second surface structure function is random or pseudo random.

3. (Original) The optical substrate of claim 1, wherein the at least one curved side has a parabolic or circular shape.

4. (Currently Amended) ~~The optical substrate of claim 1,~~ <u>An optical substrate comprising:</u>

<u>at least one prism structure, each of the at least one prism structures having a first surface characterized by a first surface structure function modulated by a second surface structure function, the first surface structure function having characteristics to provide that each of the at least one prism structures has a cross section with at least one curved side to provide defocusing diffusion to light incident on the substrate, the second surface structure function having characteristics to provide additional diffusion to the light incident on the substrate,</u>

wherein the at least one curved side is defined by an equation

$$z = \frac{cr^2}{1+\sqrt{1-(1+k)c^2r^2}} + dr^2 + er^4 + fr^6,$$

wherein z is a perpendicular deviation of a surface of the curved side from a straight line originating at a first reference point and terminating at a second reference point and coefficients of the equation lie within the following approximate ranges: $-20 < c < 20$; $-10 < d < 10$; $-10 < e < 10$; $-10 < f < 10$ and $-1 < k$ or less than or equal to zero, and where r is the distance along the straight line from the first reference point.

5. (Original) The optical substrate of claim 1, wherein the at least one curved side is defined by an equation

$z = \frac{cr^2}{1+\sqrt{1-(1+k)c^2r^2}} + \sum_{i=1}^{N} a_i r^i$ where a_i are coefficients and N is a positive integer greater than 1, z is a perpendicular deviation of a surface of the curved side from a straight line originating at a first reference point and terminating at a second reference point, and where r is the distance along the straight line from the first reference point.

6. (Original) The optical substrate of claim 1, wherein the second surface structure function provides that the at least one prism has a bowed shape.

7. (Original) The optical substrate of claim 1, wherein the at least one prism structure comprises a plurality of prism structures, each of the plurality of prism structures has a prescribed peak angle, α, a height, h, a length, l, and the plurality of prism structures has a pitch, p.

8. (Original) The optical substrate of claim 7, wherein a peak angle of each of the at least one prism structures is greater than 90 degrees and the refractive index of the substrate is between approximately 1.65 and 1.8.

9. (Original) The optical substrate of claim 7, wherein a peak angle of each of the at least one prism structures is approximately 100 degrees.

10. (Original) A method of fabricating the optical substrate of claim 1, comprising:

bringing a cutting tool into contact with the surface of a workpiece;

for at least one cutting pass, causing relative movement between the cutting tool and the surface of the workpiece along a path in the surface of the workpiece;

forming a positive or negative electroform over the surface of the workpiece to provide the optical substrate of claim 1.

11. (Original) The method of claim 10, wherein the at least one curved side is defined by an equation

$$z = \frac{cr^2}{1 + \sqrt{1 - (1 + k)c^2 r^2}} + dr^2 + er^4 + fr^6 ,$$

wherein z is a perpendicular deviation of a surface of the curved side from a straight line originating at a first reference point and terminating at a second reference point and coefficients of the equation lie within the following approximate ranges: $-20 < c < 20$; $-10 < d < 10$; $-10 < e < 10$; $-10 < f < 10$ and $-1 < k$ or less than or equal to zero, and where r is the distance along the straight line from the first reference point.

12. (Original) A method of fabricating the optical substrate of claim 1, comprising:

bringing a cutting tool into contact with the surface of a workpiece;

for at least one cutting pass, causing relative movement between the cutting tool and the surface of the workpiece along a path in the surface of the workpiece;

forming a positive or negative electroform over the surface of the workpiece; and

forming a replica of the electroform to provide the optical substrate of claim 1.

13. (Currently Amended) The method of ~~claim 16~~ claim 12, wherein the at least one curved side is defined by an equation

$$z = \frac{cr^2}{1+\sqrt{1-(1+k)c^2r^2}} + dr^2 + er^4 + fr^6,$$

wherein z is a perpendicular deviation of a surface of the curved side from a straight line originating at a first reference point and terminating at a second reference point and coefficients of the equation lie within the following approximate ranges: $-20 < c < 20$; $-10 < d < 10$; $-10 < e < 10$; $-10 < f < 10$ and $-1 < k$ or less than or equal to zero, and where r is the distance along the straight line from the first reference point.

14. (Original) A work piece for producing an optical substrate, the workpiece comprising:

at least one prism structure, each of the at least one prism structures having a first surface characterized by a first surface structure function modulated by a second surface structure function, the first surface function having characteristics to provide that each of the at least one prism structure has a cross section with at least one curved side to provide defocusing diffusion to light incident on the substrate, the second surface structure function having characteristics to provide additional diffusion to the light incident on the substrate.

15. (Currently Amended) The workpiece of ~~claim 18~~ claim 14, wherein the at least one curved side is defined by an equation

$$z = \frac{cr^2}{1 + \sqrt{1 - (1 + k)c^2 r^2}} + dr^2 + er^4 + fr^6,$$

wherein z is a perpendicular deviation of a surface of the curved side from a straight line originating at a first reference point and terminating at a second reference point and coefficients of the equation lie within the following approximate ranges: $-20 < c < 20$; $-10 < d < 10$; $-10 < e < 10$; $-10 < f < 10$ and $-1 < k$ or less than or equal to zero, and where r is the distance along the straight line from the first reference point.

16. (Original) A backlight display device comprising:

an optical source for generating light;

a light guide for guiding the light there along including a reflective device positioned along the light guide for reflecting the light out of the light guide; and

the optical substrate of claim 1, wherein optical substrate is receptive of the light from the reflective device.

17. (Original) The backlight display device of claim 16, wherein the at least one curved side is defined by an equation

$$z = \frac{cr^2}{1 + \sqrt{1 - (1 + k)c^2 r^2}} + dr^2 + er^4 + fr^6,$$

wherein z is a perpendicular deviation of a surface of the curved side from a straight line originating at a first reference point and terminating at a second reference point and

coefficients of the equation lie within the following approximate ranges: $-20 < c < 20$; $-10 < d < 10$; $-10 < e < 10$; $-10 < f < 10$ and $-1 < k$ or less than or equal to zero, and where r is the distance along the straight line from the first reference point.